Attorney's Docket No. SAE-0027

ENGLISH LANGUAGE TRANSLATION OF THE ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT UNDER PCT ARTICLE 36

(Amended Specification and Claims under Article 34)

Replacement Sheets for Claims

International Application No.: PCT/JP03/00593

Applicant: Masato Tanaka et al.

Title: NOVEL PROCESS FOR PRODUCING 1,2-DIOL

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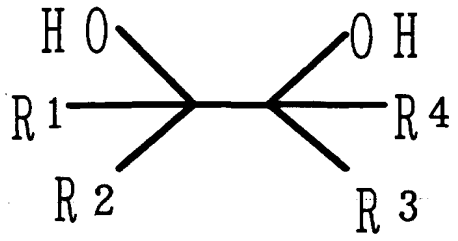
CLAIMS

1. A method for producing a 1,2-diol compound represented by the general formula [2]:



[2]

wherein R^1, R^2, R^3, and R^4 independently represent a hydrogen atom, a carboxyl group, a cyano group, a nitro group, a sulfonic acid group, an alkyl group which may have a substituent, a cycloalkyl group which may have a substituent, an aryl group which may have a substituent, an aralkyl group which may have a substituent, a heterocyclic group which may have a substituent, an alkoxy group which may have a substituent, an alkoxycarbonyl group which may have a substituent, an acyl group which may have a substituent, an amide group which may have a substituent, a silyl group which may have a substituent, a phosphoryl group which may have a substituent, a sulfinyl group which may have a substituent, a sulfonyl group which may have a substituent, or a sulfonate group which may have a substituent. Any two of R^1, R^2, R^3, and R^4 may lose a hydrogen atom to be bonded together to form a ring with a carbon atom bonding to them, and any two of R^1, R^2, R^3, and R^4 may lose a hydrogen atom and be bonded through a divalent atom and/or a divalent functional group to form a ring with a carbon atom bonding to them,

characterized by reacting an olefin compound represented by the general formula [1]:

$R^1R^2C=CR^3R^4$ [1]

wherein R^1, R^2, R^3, and R^4 are as defined above,

with hydrogen peroxide in the presence of a polymer compound having a sulfonic acid group.

2. The method according to claim 1, wherein the hydrogen peroxide is in the form of an aqueous hydrogen peroxide solution.

3. The method according to claim 1 or 2, wherein the polymer compound having a sulfonic acid group is a styrene polymer with a side chain comprising a sulfonic acid group.

4. The method according to claim 1 or 2, wherein the polymer compound having a sulfonic acid group is a styrene-divinylbenzene copolymer with a side chain comprising a sulfonic acid group.

5. The method according to claim 1 or 2, wherein the polymer compound having a sulfonic acid group is a fluorocarbon resin with a side chain comprising a sulfonic acid group.